

REMARKS

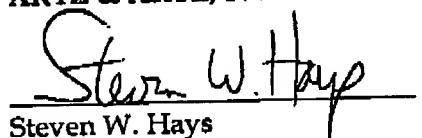
In the Office Action claims 2-8, 10-14, 17-23 and 25-26 stand rejected under 35 U.S.C. 102(b), as being anticipated by Jansen et al. (U.S. Patent No. 6,058,596). In response to this rejection, Applicants have amended independent claims 2, 3, 10, 11, 17, and 18 to include the limitation wherein at least one of the sensing slots is located between adjacent pair of rotor bars. Applicants respectfully note that none of the sensing slots in Jansen are located between adjacent pairs of rotor bars, but instead are directly linked within the width of the rotor bars around the outer periphery to create saliency. Applicants respectfully submit that this change is fully supported by the originally filed Specification, starting on page 10, line 21 and proceeding through page 11, line 5, in which the number and location of the sensing slots are not tied to the rotor bars and thus does not limit the potential to create the desired saliency.

In view of the foregoing amendments and remarks, the Applicants submit that claims 2-8, 10-14, 17-23 and 25-26 are all in proper form and patently distinguish from the prior art. Accordingly, allowance of the claim and passage of the application to issuance is respectfully requested.

The Examiner is invited to telephone the Applicants' undersigned attorney at (248) 223-9500 if any matters remain unresolved.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADEIn The Claims:

Please amend claims 2, 3, 10, 11, 17, and 18 as follows:

2. (Three Times Amended) A method for modifying an electric machine drive rotor having a stator to create rotor-position-dependent saliency and allow sensorless control, the method comprising:

providing a plurality of rotor bars uniformly spaced around the rotor; and

providing a plurality of sensing slots uniformly spaced around the rotor; wherein at least one of said plurality of sensing slots is [not centered to a corresponding one] located between an adjacent pair of said plurality of rotor bars positioned around the rotor.

3. (Three Times Amended) A method for modifying an electric machine drive rotor having a stator to create rotor-position-dependent saliency and allow sensorless control, the method comprising:

providing a plurality of rotor bars uniformly spaced around the rotor; and

providing a plurality of sensing slots variably spaced in a repeating manner around the rotor, wherein the distance between an adjacent pair of said plurality of sensing slots is variably spaced with respect to the distance between a next adjacent pair of said plurality of sensing slots and wherein at least one of said plurality of sensing slots is [not centered to a corresponding one] located between an adjacent pair of said plurality of rotor bars positioned around the rotor.

10. (Three Times Amended) A sensorless control electric machine drive comprising:

a stator having a plurality of stator slots; and

a rotor having a plurality of rotor sensing slots located along its outer periphery, said rotor also having a plurality of rotor bars, wherein said plurality of rotor sensing slots are coupled to said plurality of stator slots and wherein said plurality of rotor sensing slots are spaced uniformly around the outer periphery of said rotor and wherein at least one of said plurality of rotor sensing slots is [not centered to a corresponding one] located between an adjacent pair of said plurality of rotor bars positioned around the rotor.

11. (Three Times Amended) A sensorless control electric machine drive comprising:

a stator having a plurality of stator slots; and

a rotor having a plurality of rotor sensing slots located along its outer periphery, said rotor also having a plurality of rotor bars, wherein said plurality of rotor sensing slots are coupled to said plurality of stator slots and wherein said plurality of rotor sensing slots are variably spaced in a repeating pattern around the outer periphery of said rotor, wherein the distance between an adjacent pair of said plurality of sensing slots is variably spaced with respect to the distance between a next adjacent pair of said plurality of sensing slots and wherein at least one of said plurality of rotor sensing slots is [not centered to a corresponding one] located between an adjacent pair of said plurality of rotor bars positioned around the rotor.

17. (Three Times Amended) A sensorless control electric machine drive comprising:  
a stator having a plurality of stator slots; and  
a rotor having a plurality of rotor sensing slots located along its outer periphery, said rotor also having a plurality of rotor bars, wherein said plurality of rotor sensing slots are spaced uniformly around the outer periphery of said rotor and wherein at least one of said plurality of rotor sensing slots is [not centered to a corresponding one] located between an adjacent pair of said plurality of rotor bars positioned around the rotor.

18. (Three Times Amended) A sensorless control electric machine drive comprising:  
a stator having a plurality of stator slots; and  
a rotor having a plurality of rotor sensing slots located along its outer periphery, said rotor also having a plurality of rotor bars, wherein said plurality of rotor sensing slots are variably spaced in a repeating pattern around the outer periphery of said rotor, wherein the distance between an adjacent pair of said plurality of sensing slots is variably spaced with respect to the distance between a next adjacent pair of said plurality of sensing slots and wherein at least one of said plurality of rotor sensing slots is [not centered to a corresponding one] located between an adjacent pair of said plurality of rotor bars positioned around the rotor.